

## **\*\*\*\* Working Plan \*\*\*\***

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### **Managing Asthma: the "School System"**

(A Chapter Proposed for the Rhode Island Asthma Control Plan)

#### **Acknowledgements**

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#### **Foreword**

Throughout this document, the term "school system" is not used in its usual sense, i.e., to refer to a group of schools unified under the aegis of a town, municipality, or organization, but rather, to refer to the totality of all public and private schools, grades K-12, in the State.

## I. Planning Groups

Many people contributed to this working chapter of the Rhode Island Asthma Control Plan. The contributors worked together in several planning groups, as follows:

Ad Hoc Healthy Schools! Healthy Kids! Planning group (2 planning sessions): An ad hoc group convened for planning by the Healthy Schools! Healthy Kids! Initiative, a joint project of the Rhode Island Department of Health and the Rhode Island Department of Education.

The Rhode Island Tobacco Control Coalition (2 planning sessions): a statewide coalition of organizations and individuals dedicated to the development and coordination of a comprehensive tobacco prevention and control program for the State. The Coalition is organized to reduce illness and deaths from diseases caused by tobacco. Membership on the Coalition is open to any organization or individual who chooses to affiliate with the Coalition to help reduce tobacco use in Rhode Island. Members come from all sectors of Rhode Island including schools, health care, work site, community and others.

Participants at the June 9, 2000 Asthma Summit (1 conference workshop): 119 people attending the first Rhode Island Asthma Summit on June 9, 2000 critiqued some of the ideas developed by the two preceding groups, adding ideas of their own for the development of this chapter. Participants included physicians, nurses, respiratory therapists, social workers, pharmacists, public health officials, school officials, representatives of community organizations, and other interested parties. The Rhode Island Department of Health and the American Lung Association of Rhode Island organized the June 9th Asthma Summit with volunteers from many organizations throughout Rhode Island.

School Nurse Teacher Focus Groups: The Asthma Control Program, in collaboration with the Healthy Schools! Healthy Kids! Initiative, is holding a series of school nurse teacher focus groups to address issues of asthma management from the school nurse teacher's perspective. One focus group is planned for participants who work with elementary school students, and one is planned for those who work either with middle school students or with high school students. From six to eight school nurse teachers will participate in each group. Membership in the focus groups after the fact (in tapes, transcripts, and summary reports) is anonymous.

Participants at the September 22, 2000 Asthma Summit: Participants at the second Rhode Island Asthma Summit on September 22, 2000 will critique this chapter as written, suggesting modifications. It is anticipated that participants will represent a broad range of professions and organizations interested in reducing the burden of asthma in Rhode Island. The Rhode Island Department of Health and the American Lung Association of Rhode Island have organized the September 22nd Asthma Summit with volunteers from many organizations throughout Rhode Island.

<p>The membership of each of the groups listed above (except for those whose anonymity has been assured) is included in Section VIII of this chapter.</p>
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## II. Coordination

The planning effort that resulted in this chapter has been coordinated with a number of asthma control efforts in Rhode Island, New England, and the country as a whole:

Medicine and Health / Rhode Island: In 1999, many local experts shared their thoughts on asthma control by contributing to a special continuing medical education (CME) issue of *Medicine and Health / Rhode Island*, Rhode Island's journal of medicine and public health practice. This effort was the result of a collaboration between the Rhode Island Medical Society and the Rhode Island Public Health Association, with financial support from the American Public Health Association, the American Medical Association, and the Robert Wood Johnson Foundation. The CME issue on asthma, published in July 1999, was co-edited by Charles Sherman, MD, MPH, Associate Professor, Brown University School of Medicine, and Patricia Nolan, MD, MPH, Director of Health. Articles from the CME issue were used as an introduction to the planning sessions described in Part I of this chapter.

The Managed Care and Public Health Collaborative of New England: This group brings together the Health Commissioners/Directors of the New England states with representatives of the major health plans in the region to explore collaborations between public health and managed care. One of four sets of recommendations released by the group in June, 2000 focuses on the management of pediatric asthma, and has a section devoted to "Action on Asthma in Schools."

The Providence Pediatric Asthma Coalition: This coalition of community organizations was founded to reduce the burden of asthma on children in the City of Providence, Rhode Island, with special emphasis on inner city children from low-income families. The Rhode Island Department of Health, the American Lung Association of Rhode Island, major health plans, and major health care agencies are all represented in the group. Presently, the coalition is focussing on the Providence Public Schools as a major channel for asthma education and control among the city's children and their parents. Strong ties between the coalition's work and the statewide asthma control planning process will assure consistency and augmentation between the two.

Healthy People 2010: This national planning effort has developed ten-year public health goals for the United States. Goals from its chapter on asthma are consistent with the recommendations for asthma control developed in Rhode Island, New England, and the City of Providence. To assure coordination between asthma control efforts in Rhode Island and the nation as a whole, the Healthy People 2010 goals for asthma are proposed as ten-year goals for asthma control in Rhode Island.

## III. Brief Synopsis of Asthma Management

Managing asthma is complex. Asthma triggers abound, the control of asthma commonly requires long-term (controller) and short-term (rescue) medication, and the delivery of medication (usually inhaled) requires the use of devices such as inhalers, spacers, and peak-flow meters. To be used effectively, asthma medications must be used at the right times and in varying amounts, depending on the patient's immediate need. To know what to do and when to do it usually requires a written asthma action plan, with contingencies governing the use of medication and back up from physicians and

emergency departments. All of this must be managed by the patient in a world that is not asthma-friendly. People in the patient's immediate support group may not understand asthma, its causes, or its management, and probably harbor common misunderstandings about the condition – that people with asthma should not exercise, that the origin of asthma is entirely psychological (therefore suspect), that asthmatics are "wimps." Finally, asthma triggers tend to be much more severe in places where low-income people live, learn, work, and play, placing a disproportionate asthma burden on the very people who are least likely to have the financial resources to cope with it.

The stakes are high for individuals. When asthma is poorly managed, patients are at risk of activity limitation (sometimes extreme), social ostracism (especially among children and teens), severe asthma attacks (requiring emergency department visits and hospitalizations), even death.

The stakes are high for our state. An estimated five-percent of the state's population has asthma, and the prevalence is increasing for reasons unknown. Among families of low income, the prevalence of asthma may be double or triple that of the population as a whole. Children are hardest hit. Because of their social status, children are least likely of all people to be able to control their physical and social environments. Poorly managed asthma takes its toll on schooling, productivity, and health care costs.

To reduce the incidence and severity of asthma and its consequences in our society will not be easy. To do so, we must reduce exposure to asthma triggers, assure access to excellent health care (primary and specialty care), and support patients and their families as they attempt to manage triggers, medications, devices, medical care, lifestyle, and widespread societal ignorance. Problems abound. We must work closely with one another to overcome them.

#### **iv. Problems Identified by the Planning Groups**

##### **A. Managing Asthma in School**

1. Between five and ten percent of Rhode Island school students in grades K-12 have asthma. At least five percent of their teachers and other school staff also have asthma.
2. In general, school physicians are not involved in the development of school health policy. Their expertise would contribute to better school policies for the management of asthma.
3. In general, primary care providers are not in close contact with the schools their patients attend. Many providers have not found a simple and consistent way to communicate with school nurse teachers and other school officials about the needs of their pediatric asthma patients. As a result, many students with asthma do not have asthma management plans on file in school, and school staff members are unable to help them manage their asthma appropriately. Students with poorly managed asthma are less likely than students with well managed asthma to perform well in class and to exercise appropriately. They are more likely to miss school and to be sent home from school with uncontrolled asthma.

4. In general, school health personnel are in short supply. There are many health needs competing for their time.
5. In general, school staff members need more guidance and support to help students manage asthma.
6. Asthma education and treatment frequently fail to be culturally and linguistically sensitive, inclusive, and competent.

## **B. Managing Asthma Triggers in School**

1. Many schools harbor asthma triggers such as mold, dust, animal dander, and chemical residues.
2. Many secondary schools are contaminated with environmental tobacco smoke (ETS), a powerful asthma trigger, because many teens smoke in lavatories and other private places in secondary schools, despite prohibitions against doing so.
3. Most schools in Rhode Island do not undergo routine inspections to identify and evaluate asthma triggers and other environmental hazards.
4. Very few schools in Rhode Island have implemented programs to reduce asthma triggers, such as "Tools for Schools."
5. State and municipal governments do not have a standard mechanism for evaluating environmental hazards in schools.
6. Schools in lower-income neighborhoods tend to be older than schools in higher-income neighborhoods and tend to receive fewer financial resources for maintenance, resulting in poorer management of asthma triggers.

## **v. Recommendations of the Planning Groups**

### **A. Managing Asthma in School**

1. The major goal of the recommendations for "managing asthma in school" is to assure that all students with asthma learn to self-manage their asthma successfully, with appropriate support from primary care providers, school personnel, and family members, so that they can participate fully in school activities.
2. Engage school physicians in the process of improving asthma management in the schools.
3. Train school health staff and school physical education teachers about asthma management, including asthma symptoms and severity, the proper use of asthma medication and equipment, and the potential side effects of medications for asthma.

4. Train all school staff, including bus drivers, to recognize potential asthma symptoms, to enable them to refer students with such symptoms to school health staff in a timely fashion.
5. Develop a course for continuing education credits which would inform teachers and school administrators about the management of asthma and other health conditions common among students.
6. Incorporate asthma awareness modules in health education curricula to help all students understand lung function, asthma, and common asthma triggers in the schools, and to reduce the stigma of asthma.
7. Assure that all students with asthma have a written asthma management plan on file in school, to be updated at least annually, including a rating of asthma severity, and that the plan is being used at home as well as in school.
8. Include a specific place to record asthma information on student physical examination forms.
9. Inform parents of students with asthma about the importance of physical activity for children with asthma.
10. Incorporate standard asthma management procedures in all physical education classes, to assure the fullest possible participation of students with asthma.
11. Provide special transportation for students with asthma only when specific physical needs are documented.
12. Address the emotional needs of students with asthma.
13. Consider developing standing medical orders for asthma rescue medications in schools.
14. Assess the desirability of students with asthma wearing medical identification bracelets.
15. Track asthma-related absenteeism of students and school personnel to monitor the effectiveness of managing asthma in school.

## **B. Managing Asthma Triggers in School**

1. The major goal of the recommendations for "managing asthma triggers in school" is to reduce asthma triggers in schools to an absolute minimum within existing physical plants.
2. Develop a program to reduce exposure to environmental tobacco smoke (ETS) in secondary schools (middle schools, junior high schools, and high schools) and raise awareness about the dangers of ETS for people with asthma.

3. Using the *Rules and Regulations for School Health Programs*, Part IV, "Healthful School Environment," as a guide:
  - a. Develop a program to train school staff on the control and reduction of asthma triggers in schools.
  - b. Develop a practical reporting system to monitor the control of asthma triggers in schools.
  - c. Develop and promote low-cost methods to control and reduce asthma triggers in schools.
  - d. Explore the use of "Tools for Schools" in Rhode Island schools as a way to improve air quality.
4. Explore the relevance of the Americans with Disabilities Act for controlling asthma triggers in public and private schools.
5. Educate the parents of students with asthma about common asthma triggers in the schools, to invest them, PTAs, and PTOs in the process of developing a more healthful school environment.
6. Explore approaches to the recording of information about severe asthma attacks, to help school staff identify asthma triggers in the schools to which individual students may be sensitive.
7. Develop a course for continuing education credits which would inform teachers and school administrators about the control of asthma triggers and other issues relevant to healthy physical environments in schools.
8. Engage school improvement teams in the process of monitoring and improving the physical environments of schools; link improvement of a school's physical environment to "school improvement."

## VI. **Healthy People 2010 Objectives for Asthma**

As stated above, this national planning effort has developed ten-year public health goals for the United States. Goals from its chapter on asthma are consistent with the recommendations for asthma control developed in Rhode Island, New England, and the City of Providence. To assure coordination between asthma control efforts in Rhode Island and the nation as a whole, the *Healthy People 2010* goals for asthma are proposed as ten-year goals for asthma control in Rhode Island. The original numbering of *Healthy People 2010* goals for asthma has been retained to facilitate comparisons between Rhode Island, other states, and the nation as a whole:

- 24-1. Reduce asthma deaths.
- 24-2. Reduce hospitalizations for asthma.
- 24-3. Reduce hospital emergency department visits for asthma.

- 24-4. Reduce activity limitations.
- 24-5. (Developmental) Reduce the number of school or workdays missed by persons with asthma due to asthma.
- 24-6. Increase the proportion of persons with asthma who receive formal patient education, including information about community and self-help resources, as an essential part of the management of their condition.
- 24-7. (Developmental) Increase the proportion of persons with asthma who receive appropriate asthma care according to the NAEPP Guidelines.
- 24-8. (Developmental) Establish in at least 15 States a surveillance system for tracking asthma death, disability, impact of occupational and environmental factors on asthma, access to medical care, and asthma management.

## VII. Next Steps

Two next steps have been suggested: A/ to create a fully organized School Asthma Management Professional Advisory Committee for developing the recommendations of the planning groups, and B/ to assure that asthma surveillance in Rhode Island meets the needs of SAMPAC, and is capable of measuring progress toward *Healthy People 2010* goals.

- A. Develop and support the School Asthma Management Professional Advisory Committee (SAMPAC), as an advisory body to the Healthy Schools! Healthy Kids! Initiative, and to the statewide Asthma Control Program.
  - Membership: Representatives of the Rhode Island Department of Health, the Rhode Island Department of Education, the American Lung Association of Rhode Island, school physicians, school nurse teachers and representatives of the Rhode Island Certified Nurse Teacher Association, physical education teachers, school maintenance staff, school administrators, superintendents, students with asthma, the parents of students with asthma, representatives of Hasbro children's Hospital, and (in the future) certified asthma educators  
  
SAMPAC will assure that its membership is inclusive and diverse with regard to racial and ethnic representation.
  - Mission:  
  
SAMPAC will monitor the burden of asthma in Rhode Island schools, develop policies to reduce that burden, and promote those policies at the state and local level.  
  
SAMPAC will monitor and promote the coordination of asthma-related public and professional education in Rhode Island schools.



SAMPAC will identify air-quality problems in Rhode Island school facilities and recommend remedies, including the development of related state and local policies.

SAMPAC will appoint sub-committees to discharge ongoing responsibilities for the committee.

SAMPAC will appoint task forces to undertake short-term and long-term projects and to study issues of potential importance for the control of asthma in Rhode Island schools.

- Staffing: SAMPAC will be supported primarily by staff of the Healthy Schools! Healthy Kids! Initiative and the Rhode Island Asthma Control Program, based at the Rhode Island Department of Health, supported by staff of the American Lung Association of Rhode Island.

- Subcommittees:

✓ Public Education

**Mission:** Develop and promote a schools-based asthma education program for students with asthma and their families, working from existing asthma education programs. Integrate the program with the asthma-related media campaign developed by Rhode Island Asthma Control Program. Make use of the common vocabulary and messages to be developed by the Program for asthma education.

Include messages intended to reduce the stigma of asthma.

Include information about common asthma triggers in schools.

Assure the consistency and quality of information throughout public and private schools.

**Duration:** Ongoing

**Products:** 1/ An assessment of existing school-based programs for asthma education

2/ The design of a Rhode Island program, with age-appropriate modules

3/ A plan to promote and disseminate the program in Rhode Island schools

**Timeline:** - #1 due to SAMPAC 7/2001

- #2 due to SAMPAC 1/2002

- #3 due to SAMPAC 7/2002

✓ School Professional Education and Support

**Mission:** Develop and maintain ongoing asthma-related education and support programs for school staff, including an integrated web site for school staff.

Develop and maintain a close liaison with the Asthma Professional Advisory Committee (APAC) of the statewide Asthma Control Program. Establish joint agendas for improving asthma-relevant links between the health care system and the "school system" in Rhode Island.

**Duration:** Ongoing

**Product:** Ongoing, high-quality presence in all relevant in-service education programs for school staff in Rhode Island, and related web site

✓ Surveillance

**Mission:** Develop a schools-based surveillance system to include information on asthma prevalence, asthma-related absenteeism of students, teachers, and other school staff, support for students with asthma, asthma triggers.

Develop methods for assessing the special asthma-related needs of students from families of low income, particularly homeless families.

**Duration:** Ongoing

**Product:** A plan for schools-based, asthma-relevant surveillance, including recommended data elements, sources of data, and methods of data collection and analysis

• Task Forces:

✓ ETS

**Aegis:** SAMPAC, in collaboration with the Rhode Island Tobacco Control Coalition

**Mission:** Assess the problem of ETS in Rhode Island's secondary schools.

Recommend methods for monitoring ETS in Rhode Island's secondary schools, to result in an annual report on the subject, released jointly by the Healthy Schools! Healthy Kids! Initiative and the Rhode Island Tobacco Control Program.

Research available programs for the elimination of ETS in secondary schools.

Research available programs for teaching students about avoiding ETS.

Recommend ways to involve parents in the process of keeping schools smoke free.

**Duration:** One year

**Product:** Report to SAMPAC

**Timeline:**

- Draft report to SAMPAC 7/2001
- Draft aired at annual summit, 9/2001
- Final report to SAMPAC 11/2001

✓ Animal Dander

**Aegis:** SAMPAC

**Mission:** Assess the problem of animal dander in Rhode Island's schools.

Recommend methods for monitoring animal dander and its control in Rhode Island's schools, to result in an annual report on the subject, released by the Healthy Schools! Healthy Kids! Initiative.

Research available programs for the control of animal dander in schools.

**Duration:** One year

**Product:** Report to SAMPAC.

**Timeline:**

- Draft report to SAMPAC Sub-Cmte 7/2001
- Draft aired at annual summit, 9/2001
- Final report to SAMPAC 11/2001

- B. Assure that asthma surveillance developed by the asthma control program meets the needs of SAMPAC, and is capable of measuring progress toward *Healthy People 2010* goals. Recommendations to accomplish this goal will be published as a separate chapter of the asthma control plan in late fall, 2000.

## VIII. Membership of the Planning Groups

### A. Ad Hoc Healthy Schools! Healthy Kids! Planning Group

Peter Simon, MD Pediatrician (RI Department of Health)	Louise Kiessling, MD Chief Pediatrician (Memorial Hospital)
Elizabeth Shelov Regulations Specialist (RI Department of Health)	Cathy Mansell Draw A Breath Program (Hasbro Children's Hospital)
Jackie Ascrizzi Health Services Specialist (RI Department of Education)	Margaret Kane Executive Director (American Lung Association of RI)
Michele Dair, NP School Health Center Provider (Central Falls Schools)	Molly Clark (American Lung Association of RI)
Celine Forte, RN School Nurse Teacher (Smithfield Schools)	Ann Marie Cardosi (Memorial Hospital)
Joanne Johnson, NP School Health Center Provider (Pawtucket Schools)	Robert T. Burke, MD, Pediatrician (Memorial Hospital)
Deborah Vannoy, RN School Nurse Teacher (South Kingstown Schools)	Lodie Lambright Asthma Program Manager (RI Department of Health)
Hillary Salmons Executive Director (HELP Coalition)	

### B. The Rhode Island Tobacco Control Coalition

Laura Hilderly, RN, MS (Chair)	Joseph Le Socio-economic Development Center for Southeast Asians
Sandra DelSesto Initiatives for Human Development	John Fulton, PhD RI Dept of Health
Jennifer Mansfield American Heart Association	Allessandra Kazura, MD American Academy of Pediatrics
George A. Zainyeh American Cancer Society	Darrell Waldron RI Indian Council
Margaret Kane American Lung Association	Mary Anne Roll RI Parent Teacher Association
Angelo Garcia Channel One - Centrall Falls	Kathryn Meier University of RI
Alicia Price East Providence Substance Abuse Task Force	Ann Kelsey Thacher Health Promotion RI Dept of Health
Judy DePue Miriam Hospital	Loretta Becker Urban League of RI
Clifford Monteiro N.A.A.C..P.	Alan D. Sirota, PhD Veteran's Medical Center
Patricia Martinez Progreso Latino	Tyrone Akion Youth Taking a Stand
Arvin Glicksman, MD RI Cancer Council	Kevin Malave Youth Taking a Stand
Marcia Campbell RI Dept of Education	Hasan Abdullah Youth Taking a Stand